Additional chart coverage may be found in CATP2, Catalog of Nautical Charts.  $SECTOR~\pmb{6} \longrightarrow CHART~INFORMATION$ 

# SECTOR 6

#### NORTH AND NORTHEAST COASTS OF IRELAND

**Plan.**—This sector describes the N and NE coasts of Ireland from Malin Head to the S side of Strangford Lough Narrows. The descriptive sequence is from N to S.

#### **General Remarks**

6.1 The N and NE coasts of Ireland between Malin Head and Killard Point, extending 108 miles E and SE, are bordered by high, bold cliffs which rise gradually inland to conspicuous peaks which, under favorable weather conditions, are visible for a considerable distance offshore. These peaks are invaluable aids to vessels navigating along this coast.

Strangford Lough, although subject to strong currents, is an excellent harbor of refuge for vessels taking shelter from storms in the Irish Sea.

**Winds—Weather.**—Off the N and NE coasts of Ireland, winds reach gale force most frequently during December and January when the average number of gales per month exceeds 10. May through August are the months with the fewest gales.

Snow usually falls to some extent from November to April over the open sea N of Ireland and on the N and E coasts. It is most likely to be experienced from January to March, especially when NE winds prevail. The aspect of the coast may change considerably after a snowfall. Fog may occur at any time, but is most common during the summer.

**Tides—Currents.**—The tidal currents setting SE and NW through North Channel attain rates of 3.5 to 4 knots in midchannel at springs. Heavy overfalls and rips may occur off the banks and salient points of the coast. During unsettled weather, dangerous rips are usually encountered within Rathlin Sound and in the vicinity of several of the banks lying N of Inishtrahull and Rathlin Island. Caution should be observed by small vessels when navigating through these areas.

**Caution.**—Submarines exercise frequently, both surfaced and dived, in the waters N of Malin Head.

A IMO-adopted Traffic Separation Scheme (TSS) has been established within North Channel and lies between Rathlin Island and the coast of Scotland. The separation zones and traffic lanes of this TSS may best be seen on the chart. Laden tankers over 10,000 grt are advised to avoid the inshore traffic zones of this TSS.

Laden tankers should not use the narrow channel leading through Rathlin Sound.

**Note.**—The direction of the Lateral Buoyage System (IALA) around Ireland changes at Malin Head.

#### **Off-lying Islands and Dangers**

6.2 The Garvan Isles (55°23'N., 7°19'W.), consisting of an extensive group of small islets and rocks up to 20m high, lie centered about 1 mile off the coast, 3.1 miles ENE of Malin Head. The currents in the vicinity of these dangers are strong and caution should be exercised when approaching them. Garvan Sound lies between this group and the rocks fronting

the mainland coast to the S. Although only about 200m wide and with strong currents, the fairway of this passage is reported to present no difficulty in daylight for small vessels.

**Inishtrahull** (55°26'N., 7°14'W.) lies 6.5 miles NE of Malin Head. Rounded hills, 41m high, rise at the E and W ends of this island and are joined by a stretch of low ground. A main light is shown from a prominent tower, 23m high, standing at the W side of the island. A racon is situated at the light.

Tor Rocks, up to 22m high, lie centered 1 mile NNW of Inishtrahull. Tor Sound leads between this group of rocks and the N side of the island. Vessels can pass to the S of the island through Inishtrahull Sound, but if passing to the N, they should pass N of Tor Rocks and not attempt to pass through Tor Sound.

**Hempton's Turbot Bank** (55°26'N., 6°57'W.), with a least depth of 15.8m, lies about 9 miles E of Inishtrahull.

**Shamrock Pinnacle** (55°21'N., 6°24'W.), with a least depth of 15.9m, lies about 5.2 miles NW of the W end of Rathlin Island.

**Laconia Bank** (55°26'N., 7°14'W.), with a least depth of 20.1m, lies 2 miles N of Shamrock Pinnacle.

Vessels should avoid the above banks as, in bad weather, overfalls form over their shallowest parts.

**Rathlin Island** (55°18'N., 6°12'W.) lies with its W extremity located 7.2 miles ENE of Benbane Head. The S portion of the island is broken into hummocks which gradually decline in height towards Rue Point, the low and rocky S extremity. A main light is shown from a tower, 18m high, standing at the W side of the island, 0.5 mile N of Bull Point, the W extremity. A main light is also shown from a prominent tower, 27m high, standing at the NE end of the island. A light is shown from a tower, 11m high, standing on Rue Point, the S extremity of the island.

MacDonnel Race extends from about 0.5 to 1 mile off Altacarry Head, the NE extremity of the island, and should be avoided by small vessels. This race is fully formed about 1 hour after the tidal current setting E begins and continues until it ends.

Church Bay lies on the S side of the island and, although exposed to the W, provides anchorage for small vessels. Care must be taken to avoid a dangerous wreck which lies within the bay and is marked by a lighted buoy. The depths are moderate and the holding ground is good.

**Rathlin Sound** (55°14'N., 6°10'W.) lies between Rathlin Island and the mainland coast to the S. Attention should be given to the currents within this passage which can be strong and varied in direction. During the strength of the tidal current setting W, violent overfalls form at the E end of the sound and are usually centered about 1.5 miles SW of Rue Point. The currents set strongly in this area and attain rates of up to 6.5 knots in the sound, and 4 knots about 1 mile N of the N coast of Rathlin Island.

The Maidens (54°56'N., 5°44'W.), consisting of two groups of rocks separated by a navigable passage, lie centered 4.6 miles NE of Ballygalley Head. The S group consists of two prominent above-water rocks. A conspicuous disused light tower, along with several other prominent buildings, stands on West Maiden, the W rock. A main light is shown from a conspicuous tower, 23mhigh, standing on East Maiden, the E rock; a racon is located at the light. Dangerous rocks lie on a reef which extends up to 0.8 mile S from East Maiden.

The N group consists of several dangerous rocks up to 1m high. Highlandman Rock, the N rock of the group, lies 1.5 miles N of East Maiden and is marked by a beacon. An isolated shoal, with a least depth of 16.2m, lies about 2 miles E of Highlandman Rock and is generally marked by overfalls.

## Malin Head to Lough Foyle

**6.3 Malin Head** (55°22'N., 7°24'W.) is the bold NW extremity of a peninsula which terminates at Dunaldragh, the N extremity of Ireland. Scart Rocks, a steep-to group of abovewater dangers, lies close W of the head. A conspicuous ruined tower is situated near Dunaldragh and two prominent radio masts stand 1 mile SE of it.

Slievebane Bay, entered 2.3 miles E of Malin Head, affords temporary shelter to small craft, but local knowledge is required as several dangers lie in the approaches. Two conspicuous radio masts stand in the vicinity of a radio station situated 0.4 mile SSW of the head of this bay.

Stookaruddan, a prominent islet 70m high, lies about 0.1 mile offshore, 1.7 miles E of Slievebane Bay. Two prominent radio masts and a wind motor stand on a hill 1 mile SSE of this islet.

**Glengad Head** (55°20'N., 7°10'W.), located 8.3 miles SE of Malin Head, is marked by a conspicuous hummock which rises near its extremity.

Culdaff Bay, a small and exposed inlet, is entered 2.5 miles S of Glengad Head. With offshore winds, this inlet provides anchorage to small vessels with local knowledge in a depth of 7m, sand. The strong coastal tidal currents set past this bay and tend to lower the swell within it to a remarkable degree.

**Inishowen Head** (55°14'N., 6°55'W.), which terminates in an abrupt precipice, is located 10.5 miles SE of Glengad Head. The coast between is indented, bold, and precipitous.

#### **Lough Foyle**

**6.4 Lough Foyle** (55°10'N., 7°00'W.) is entered between Inishowen Head and Magilligan Point, 3 miles SW. It is the extensive estuary of the River Foyle and for the most part occupied by mudbanks. A main channel follows the NW shore of the lough and leads to the entrance of the river. The Tuns, a shallow sandbank, extends up to about 3 miles NE from Magilligan Point, on the S side of the approach. Its seaward extremity is marked by a lighted buoy.

**Tides—Currents.**—Off the entrance to Lough Foyle, the tidal currents attain rates of 2 knots at springs. The currents on both sides of the approach channel are affected by eddies. Close inside the entrance of the lough, the currents diminish in

strength and gradually become weaker as the entrance of the River Foyle is approached.

**Depths—Limitations.**—The channel leading to the entrance of the river and then to the facilities at Lisahally Terminal is reported (1994) to be dredged to a depth of 8m. The channel between this terminal and the Port of Londonderry is reported (1995) to have a least dredged depth of 4.5m.

**Aspect.**—The high and steep cliffs of Inishowen Head are conspicuous from seaward. Inishowen Light is shown from a conspicuous tower, 23m high, standing on Dunagree Point, 0.5 mile S of the head. A disused light tower stands close ENE of the light. A lighted approach buoy is moored about 2 miles NE of Inishowen Head.

A light is shown from a tower, 8m high, standing on Warren Point, 1.4 miles SW of Dunagree Point. An old fort, a castle in ruins, a white tower, and a church tower all stand near the coast in the vicinity of Greencastle, 1 mile SW of Warren Point.

The coast rises gradually inland to the peaks of the mountain range which forms the W side of the lough. Crocknasmug, the principal peak in the vicinity, rises 1.5 miles W of Inishowen Head and is 326m high.

The SE side of the entrance is low and sandy. A conspicuous martello tower and several low buildings are situated on Magilligan Point. A lighted beacon stands 0.2 mile NNW of the tower. The loom of the bright lights at the prison, which is situated 1.2 miles SSE of Magilligan Point, can be seen for many miles to seaward.

The channel through the lough is marked by lighted beacons, lighted buoys, and lighted ranges. Caution is necessary as it has been reported (1997) that the fixed structures are in poor condition.

**Pilotage.**—Pilotage is compulsory for vessels over 50 grt. Pilots can be contacted on VHF channel 12 and 14 and board in the vicinity of Moville Lighted Beacon, 2.5 miles SW of Magilligan Point, or further out on request.

Vessels should send ETA and draft, as follows:

1.To the pilot station—Monday through Friday, 0900-1700 local time.

2.To the port—all other times.

All vessels within Lough Foyle and River Foyle should maintain a continuous listening watch on VHF channel 14. Approaching vessels should report by VHF when passing the lighted buoy marking the extremity of The Tuns.

Anchorage.—Good anchorage can be taken in depths of 12 to 17m between Moville Bank, lying off Moville, and McKinneys Bank, 0.3 mile SE. Several designated anchorage berths lie between Moville Bank and Magilligan Point and can best be seen on the chart. The holding ground is good and the currents are not excessive in these areas, but closer to Magilligan Point, the current attains a rate of 4.5 knots at springs and the bottom is rocky in places.

**Caution.**—Despite frequent dredging, silting occurs in the channel and less depths than those charted may be encountered.

Orange parachute flares, which are occasionally fired from the prison situated on the SE side of the entrance, are often mistaken for, and reported as, distress flares.

The lighted beacons, which are on piles, do not mark the edge of the fairway and even shallow-draft vessels should not deviate from the recommended tracks.

### Londonderry (55'00'N., 7'19'W.)

World Port Index No. 33830

**6.5** The port of Londonderry lies along the W bank of the River Foyle, 4 miles above the entrance and 21 miles from the sea

**Tides—Currents.**—The tides at Londonderry rise about 2.7m at springs and 2m at neaps.

The currents in the River Foyle generally set in the direction of the channel, but tend to set towards the outer side of the fairway at the bends. In some parts of the channel, the changes from flood to ebb are quick with a very brief period of no perceptible current. However, in other parts of the channel, the change is slow with a fairly strong set towards one bank or the other. The currents in the river usually attain rates of 1.5 to 2.5 knots at springs.

The currents off the quays at Londonderry are affected by eddies which vary with the number, position, and draft of vessels lying alongside. For the same reason, the surface and subsurface currents may differ. Caution is therefore necessary when berthing alongside.

**Depths—Limitations.**—The city is fronted by 800m of total quayage with dredged depths of up to 7.6m alongside. Vessels using the city berths are generally limited to 153m in length, 18.2m beam, and 7.1m draft. It is reported (1995) that the channel between Lisahally Terminal and the city quays has a least maintained dredged depth of only 4.5m. See Depths and Limitations for Lough Foyle.

At Maydown, on the S side of the river adjacent to Coolkeeragh, there are two private jetties with depths of up to 8.8m alongside and facilities for tankers and chemical vessels. Vessels of up to 183m in length and 7.9m draft can be accommodated.

Lisahally Terminal, lying 0.6 mile SW of Maydown, has 365m of total quayage with depths of up to 10m alongside. Vessels of up to 35,000 dwt, 190m in length, 26m beam, and 9.3m draft can be accommodated.

**Aspect.**—Londonderry, surrounded by an ancient rampart, stands principally on the W bank of the River Foyle. The buildings, which now comprise the modern part of the city, have been considerably extended beyond the original enclosed site to the E side of the river, both parts being joined by the Craigavon Bridge. Navigation above this bridge, at the inner end of the harbor, is no longer possible.

The cathedral stands on the summit of the hill on the W bank of the river and is conspicuous from most parts of the lough.

The Coolkeeragh power station, with three conspicuous chimneys, stands on the S side of the river at Maydown.

**Caution.**—Vessels are warned that despite frequent dredging, silting occurs in the river and actual depths may be

less than those charted. The ranges and leading lines do not always follow the deepest water and local knowledge is desirable.

An overhead cable, with a vertical clearance of 40m, spans the channel close E of the jetties at Maydown.

A bridge, with a vertical clearance of 32m, spans the river 1.2 miles below the city.

### **Londonderry to Larne Lough**

**Portstewart Point** (55°11'N., 6°43'W.), marked by a light, is located 8.3 miles E of Magilligan Point. A prominent radio mast stands 0.5 mile SSE of the light.

High sand ridges extend E along the coast for about 4 miles from Magilligan Point. Then, for a further 2 miles, rocky cliffs extend up to the entrance to the River Bann. Mount Bainevenagh, 384m high, stands 5 miles SSE of Magilligan Point and is prominent. Mussenden Temple, which is very conspicuous from the NW, stands on the cliffs 1.2 miles W of the river mouth. A prominent ruined castle and a radio mast stand close S and 0.8 mile ESE, respectively, of the temple.

The tidal currents between Magilligan Point and Benbane Head, 17 miles E, probably set E and W in the direction of the coast. They attain rates of up to 2 knots at springs.

**6.6** Coleraine (55°08'N., 6°40'W.) (World Port Index No. 33820), a small port, lies 4.5 miles above the entrance of the River Bann.

**Tides—Currents.**—The tides rise about 2.1m at springs and 1.6m at neaps.

The flood current setting into the river is not very strong, but the ebb attains a rate of 3 knots at springs. With heavy rains, the rate of the ebb is increased and the flood correspondingly decreased. During the flood current, a fairly strong set is experienced setting across the entrance. Rips or overfalls are reported to form where the ebb meets the offshore currents.

**Depths—Limitations.**—There is a least depth of 4m in the entrance and a dredged depth of 3.4m throughout the channel as far as Coleraine. The port has 375m of total quayage with depths of up to 4m alongside. Vessels of up to 2,300 dwt, 82m in length, 12m beam, and 4.1m draft can be accommodated at HW.

A marina is situated on the E bank of the river and provides good facilities for small craft.

**Aspect.**—The river fairway is marked by lighted beacons and the river entrance is indicated by a lighted range.

**Pilotage.**—Pilotage is compulsory. Pilots can be contacted by VHF and board about 0.5 mile W of Portstewart Point. Vessels should sent an ETA at least 24 hours in advance.

**Anchorage.**—A fairweather anchorage area, the limits of which are shown on the chart, lies close NE of the river entrance.

**Caution.**—A railway bridge, with a navigable width of 18m below a vertical opening span, crosses the river 0.5 mile below the port.

A spoil ground area lies centered 1.2 miles NNW of the river entrance and may best be seen on the chart.

Salmon nets may be encountered within the river.

Several wrecks lie in the approach to the river and may best be seen on the chart. **6.7 Portstewart** (55°11'N., 6°43'W.), a small craft harbor, is entered close S of Portstewart Point. It is used by yachts, fishing boats, and a pilot cutter. Local knowledge is required for entry. Several buildings line the waterfront and are prominent from seaward. A conspicuous convent stands 0.3 mile S of the harbor. The town extends up to 1 mile S of the harbor and is a resort.

**Ramore Head** (55°13'N., 6°40'W.), 18m high, is located 2.5 miles NE of Portstewart Point and surmounted by a coastguard lookout building. A church, with a conspicuous tower, stands at Ballywillin, 1.7 miles S of the head. A prominent television mast and a prominent radio mast stand 2 miles SSW and 0.7 mile SSE, respectively, of the head.

A conspicuous hotel is situated 2 miles ESE of Ramore Head and some prominent white cliffs are located near it.

**6.8 Portrush** (55°13'N., 6°40'W.), a small harbor, lies close S of Ramore Head and is protected by two breakwaters. The tides rise about 2m at springs and 1.4m at neaps. The harbor has 183m of quayage with depths of 3.5 to 5.2m. It is used by small craft and fishing vessels of up to 49m in length. During NW gales, the sea breaks right across the entrance and there is a heavy run inside.

The Skerries (55°13'N., 6°38'W.), a chain of rocky islets, extends ENE for 1.5 miles and lies with its W end located 0.3 mile NE of Ramore Head. Skerries Sound leads between Ramore Head and the SW end of the chain. It has a navigable fairway, 180m wide, with depths of over 11m. A heavy sea usually prevails within this narrow passage and strong tidal currents and overfalls, especially at the W end, are often encountered.

Vessels can obtain sheltered anchorage, during the summer, within Skerries Roadstead which lies at the S side of the chain.

**The Storks** (55°13'N., 6°35'W.), consisting of an isolated patch of rocks, lies about 0.7 mile offshore, 2.5 miles E of Ramore Head. This patch is marked by a beacon and the sea breaks heavily over it in any swell.

**Portballintrae** (55°13'N., 6°33'W.), a shallow cove, lies 4 miles E of Ramore Head and affords shelter to small craft. It can be easily identified by a prominent row of houses standing at the head. The conspicuous ruins of Dunluce Castle are situated on the summit of a cliff which overhangs the sea, 1.2 miles WSW of this cove.

**6.9 Benbane Head** (55°15'N., 6°29'W.), located 3 miles NE of Portballintrae, along with Bengore Head, 0.5 mile E, is the N extremity of the high land in this vicinity. Great Stookan, standing 1.5 miles SW of the head, is a prominent, high, and rocky cliff. The Giants Causeway, located close NE of Great Stookan, is a low platform of stone which, when viewed from a distance, blends into the coast and is not readily distinguished. The coast in this vicinity has a remarkably bold appearance.

A conspicuous radio mast stands 2.7 miles S of Benbane Head. Dunseverick (Millport), a small boat harbor, lies 1.7 miles SE of Benbane Head.

**Ballintoy Point** (55°15'N., 6°22'W.), located 4 miles E of Benbane Head, is surmounted by a white church with a conspicuous tower.

A large sandbank, over which the sea breaks during NW gales or when there is much swell, extends up to 0.8 mile NNW of the point. A very small boat harbor lies along the E side of the point.

Larry Bane Head, formed by conspicuous white cliffs, is located 0.5 mile ESE of Ballintoy Point. Sheep Island, a prominent and precipitous rock, lies 0.3 mile N of these white cliffs

Carrickarade Island lies close off the coast, 0.7 mile E of Larry Bane Head. This island is connected by a crude suspension bridge to the adjacent cliffs of the mainland which are 140m high.

Kinbane Head, surmounted by the ruins of a castle, is located 2.3 miles ESE of Larry Bane Head. A conspicuous radio mast stands 1 mile SW of the head. Carrickmannanon, a small drying rock, lies 0.5 mile NE of the head and small vessels, with local knowledge, can pass inside of it. The tidal currents within Rathlin Sound set past Carrickmannanon at a great rate and cause an eddy under its lee which sets strongly back towards the rock. Great caution is therefore necessary when navigating in this vicinity.

Fair or Benmore Head, located 7.5 miles ESE of Ballintoy Point, is a very conspicuous headland, 191m high. Its top is flat and surrounded by a vertical cliff, 90m high, which slopes abruptly to the sea. The deserted works of a colliery are situated near this head. The coast in this vicinity forms the S side of Rathlin Sound and is fronted by numerous off-lying rocks.

Ballycastle, a small harbor, lies at the head of a bay 3.5 miles WSW of Fair or Benmore Head. It is protected by a breakwater and used by small craft and yachts. During fine weather, temporary anchorage can be taken in depths of 18 to 26m within the bay and about 0.5 mile offshore.

Knocklayed, 514m high, stands 2.7 miles S of Ballycastle and has a rounded summit which can easily be identified from seaward.

**Torr Head** (55°12'N., 6°04'W.), 67m high, stands 3.2 miles SE of Fair or Benmore Head and is surmounted by a disused watchtower. A conspicuous radio mast stands 1 mile WNW of this head

Cushendun Bay, entered 4.2 miles S of Torr Head, is obstructed by a dangerous wreck which lies about 0.3 mile N of the S entrance point. Although small and exposed to E winds, temporary anchorage can be taken within the bay during fine weather, in depths of 9 to 14m, close SE of the wreck

Carnaneigh, 265m high, stands 2 miles N of Cushendun Bay. This peak is prominent and rises almost vertically from the sea to its summit.

Red Bay, entered 4 miles S of Cushendun Bay, provides good anchorage, but is exposed to NE and E winds. Small vessels can anchor off a pier, which extends from the NW shore, in a depth of 5m, but a heavy swell is experienced with E winds. A fish farm is reported (1991) to lie about 1.2 miles E of the pier.

**Garron Point** (55°03'N., 5°58'W.), the S entrance point of Red Bay, is formed by a bold and precipitous headland. A conspicuous college stands 0.5 mile S of the point and is

situated at the foot of some hills which rise abruptly to heights of over 230m.

Between Garron point and Cushendun Bay, an eddy runs S along the coast during the second half of the N setting tidal current in North channel. A weaker eddy runs N during the second half of the S setting current in North channel. Off Cushendun Bay, the S setting current attains a rate of 3.2 knots at springs and the N setting current a rate of 4 knots.

**6.10** Carnlough Bay (54°59'N., 5°59'W.) lies 3.8 miles S of Garron Point and is tenable only with offshore winds. Black Rock, always uncovered, lies close NE of Straidkilly Point, the S entrance point. A small craft harbor, protected by a breakwater, fronts the village of Carnlough which stands at the N end of the bay. This village is backed by hills which rise to heights of over 300m about 1 mile inland. Collin Top, the highest peak, is 430m high and stands 3.7 miles W of the village.

Glenarm Bay is entered between Straidkilly Point and Peaks Point, 1.5 miles ESE. It provides good anchorage in a depth of 11m with offshore winds. A small drying harbor fronts the village, which stands in the S part of the bay near a river mouth, and is capable of sheltering one or two small coastal vessels. A conspicuous white building stands on Peaks Point.

Path Head, a nearly vertical headland, is located 0.3 mile ESE of Peaks Point. It is 137m high and very prominent. A conspicuous television mast is reported to stand 1.5 miles W of this headland.

**Ballygalley Head** (54°54'N., 5°51'W.), 89m high, is located 5.2 miles SSE of Peaks Point and appears as a rounded knob surmounting a steep cliff. The ruins of a castle are situated on the rocks at the base of the cliffs which form the head. A new castle stands 0.6 mile WSW of the headland at the head of a small bay. During offshore winds, good anchorage can be obtained within this bay in a depth of 11m.

Robin Young Hill, the highest of several peaks in this vicinity, rises 2.7 miles WSW of Ballygalley Head and is 383m high.

**Caution.**—A submarine cable, which may best be seen on the chart, extends seaward from a point on the shore 1.5 miles SSE of Ballygalley Head.

### Larne Lough (54°51'N., 5°48'W.)

World Port Index No. 33790

**6.11** Larne Lough (Lough Larne) is entered between Sandy Point, located 3.2 miles SSE of Ballygalley Head, and Ferris Point, 0.3 mile SE. This inlet is mostly shallow and obstructed in its inner reaches by extensive flats. The port of Larne, a major terminal for vehicle and passenger ferries, lies near the entrance and the town stands on the W side.

**Tides—Currents.**—The tides rise about 2.8m at springs and 2.5m at neaps.

Off the entrance of the lough, about 1 mile N of Ferris Point, the tidal currents set N and S and attain rates of 1.5 knots at springs. Both the rates and directions of the currents may be affected by heavy rain.

**Depths—Limitations.**—The Maidens have been previously described.

Hunter Rock, with a least depth of 0.8m, lies 2.3 miles NE of Ferris Point. It is marked by lighted buoys and may be passed on either side.

The entrance channel has a least depth of 8.3m on the range. Six principal berths for ferries, passenger, and ro-ro vessels are situated at the W side of the harbor. They are 100 to 170m long and have dredged depths of 6 to 7.5m alongside.

A tanker jetty is situated at the E side of the harbor and fronts the power station. The head is 80m long and has a dredged depth of 10.8m alongside. A small wharf, lying close S of the jetty, has depths of 3.4 to 6.4m alongside.

There are also several small boat basins within the lough and extensive moorings for yachts.

Vessels of up to 35,000 dwt, 175m in length, and 9.3m draft have been accommodated at HW.

**Aspect.**—The shores of the lough are low and predominately stony with hills rising steeply to heights of between 120 and 150m on the W side. On the opposite shore, the hills rise more gradually to heights of between 60 and 90m.

In the approach to the lough, the cliffs on the W side rise inland to high mountainous peaks. Agnew Hill, 471m high, stands 4.8 miles W of Sandy Point and is prominent.

Conspicuous landmarks include Chaine Tower, tall and gray with a conical top, standing on the outer end of a short pier which extends from Sandy Point; a disused light tower, white and surrounded by a white wall, standing on Ferris Point; and Ballylumford Power Station, with three chimneys, each 126m high, standing 0.5 mile S of Ferris Point.

Prominent landmarks include a chimney and a water tank standing at a hospital 0.7 mile W of Chaine Tower; a television mast standing on a hill, 1.2 miles NW of Chaine Tower; a tower standing on Barr Point, 0.5 mile NE of Ferris Point; and two flood lighted towers, each 43m high, standing about 0.4 mile S of Chaine Tower.

The town of Larne is situated on the W side of the entrance.

A sector light is shown from Chaine Tower and a lighted range indicates the entrance channel. An outer approach lighted buoy is moored about 0.5 mile NNW of Ferris Point and the fairway is marked by buoys and beacons.

**Pilotage.**—Pilotage is not compulsory, but is available on request. Local knowledge is required.

Vessels, other than ro-ro vessels, must advise Larne Harbor Radio 3 hours before arrival on VHF channel 14 stating:

- 1. ETA.
- 2. Maximum draft.
- 3. Whether pilot is required.
- 4. Equipment defects.
- 5. Hazardous or polluting cargo on board.
- 6. Any other relevant information.

Pilots board near Fairway Lighted Buoy No. 1.

**Anchorage.**—Vessels may anchor about 1 mile NNE of the entrance, but must remain clear of the range and submarine cables. This roadstead is somewhat exposed in heavy weather.

**Caution.**—A local magnetic anomaly exists in the vicinity of Hunter Rock; it is reported that the magnetic variation can vary up to 4.5° from normal.

A spoil ground area, which may best be seen on the chart, lies centered 1.5 miles N of the entrance.

Ferry boats cross the lough in the vicinity of the entrance.

Several submarine cables extend across the lough in the vicinity of the power station.

### Larne Lough to Belfast Lough

**6.12** Skernaghan Point (54°51'N., 5°46'W.), the N extremity of Island Magee, is located 1.1 miles ENE of the entrance to Larne Lough. Precipitous cliffs, 15 to 31m high, extend 1.5 miles SE from this point. A prominent radio mast, 37m high, stands 1.2 miles SE of the point.

**Isle of Muck** (54°51'N., 5°43'W.), bare and green, lies close off the NE extremity of Island Magee to which it is connected by a narrow, drying, stony ridge. This islet is 37m high and its E side is bordered by a vertical cliff. Temporary anchorage can be taken by small craft with local knowledge on either side of the stony ridge.

**Black Head** (54°46'N., 5°41'W.), located 5 miles SSE of Isle of Muck, is bordered by an almost vertical cliff with a rounded knob on its summit. A main light is shown from a conspicuous white tower, 16m high, standing on the head. Muldersleigh Hill, 128m high, rises 0.5 mile WNW of the head and is prominent.

**Caution.**—A submarine gas pipeline, which may best be seen on the chart, extends seaward from a point on the shore 0.5 mile SE of Skernaghan Point.

A submarine cable, which may best be seen on the chart, extends seaward from a point on the shore 1.2 miles SW of Black Head.

# **Belfast Lough**

**6.13 Belfast Lough** (54°42'N., 5°45'W.) is entered between Black Head and Orlock Point, 6.7 miles SSE, and provides an excellent port of refuge for vessels navigating the Irish Sea. The lough is 12 miles long and the port of Belfast lies at the head. The shores are backed by lofty hills, over 300m high, which rise inland to the W and SW.

**North side.—Cloghan Point** (54°44'N., 5°44'W.) is located 2 miles SW of Black Head and Kilroot power station, with a conspicuous chimney 198m high, stands 1.7 miles SW of it.

A tanker terminal jetty, which serves the power station, extends 0.6 mile ESE from the point and a lighted buoy is moored about 0.5 mile E of its seaward end. The berth at the head of this jetty can accommodate tankers of up to 70,000 dwt. Pilots for this terminal generally board about 2.5 miles E of the head of the jetty.

White Head, located 0.5 mile NE of Cloghan Point, can easily be identified by several white limestone cliffs, 91m high.

A metal jetty, which is radar conspicuous, extends 350m SE from Kilroot Point, located 1 mile SW of Cloghan Point, and is used to load salt. A jetty, 466m long, fronts the power station and is used for discharging coal. An area alongside this jetty is dredged to a depth of 7.1m and marked by buoys.

Carrickfergus (54°43'N., 5°48'W.), a small harbor, lies 1.7 miles SW of the power station and is protected by breakwaters. The tides here rise about 3.2m at springs and 2.7m at neaps. The harbor has 286m of quayage, with depths of 4.8m alongside at MHWS, and vessels take the soft mud bottom at LW. The harbor entrance is 17m wide and the basin has dredged depths of up to 1.8m, but dries over a large part.

Vessels of up to 2,100 dwt, 85m in length, and 4.7m draft can be accommodated. Pilotage is not compulsory, but may be requested through Belfast Port Control.

A conspicuous castle, 27m high, stands at the root of the E breakwater. A prominent radar tower, 9m high, stands near the head of the E breakwater and a church, with a prominent spire, stands close NW of the castle.

An extensive yacht marina lies close W of the harbor.

Knockagh, 278m high, stands 2.5 miles W of Carrickfergus. A conspicuous obelisk war memorial, 41m high, is situated close to the summit of this prominent hill.

**South side.**—**Mew Island** (54°42'N., 5°31'W.) lies 2.7 miles NE of Orlock Point. A main light is shown from a conspicuous tower, 37m high, standing at the NE end of the island. A racon is situated at the light.

Lighthouse Island lies close W of Mew Island and is surmounted by a disused light tower and several prominent buildings.

Copeland Island lies 1.7 miles E of Orlock Point and is fronted by rocks, shoals, and foul ground. Copeland Sound leads between the NE side of Copeland Island and the S sides of Lighthouse Island and Mew Island. This channel is navigable with local knowledge, but is not recommended. Its E end is almost entirely obstructed by unmarked shoals over which strong tidal currents set, causing heavy overfalls. The entrance at the E side is marked by a buoy which is moored about 1 mile S of Mew Island Light.

In thick weather, vessels should not approach these islands within depths of less than 30m.

A prominent coastguard station, with a flagstaff, stands on Orlock Point and a conspicuous water tower stands 0.5 mile SE of it. Shoals, part of which dry, and foul ground extend up to about 0.8 mile NW of Orlock Point and are marked at their seaward side by a lighted buoy.

Ballyholme Bay, lying 2.3 miles W of Orlock Point, affords good anchorage for small vessels in depths of 6 to 8m, mud, sand, and shells. Several yacht moorings lie in the W part of this bay.

**Bangor** (54°40'N., 5°40'W.), a small harbor, lies at the head of Bangor Bay, 1 mile W of Ballyholme Bay. This harbor, which is protected by breakwaters, is used by small coastal vessels and fishing boats. It is also an extensive yachting center. Pilotage is not compulsory, but pilots are available on request from Belfast. The harbor can be contacted by VHF. Vessels of up to 1,400 dwt, 120m in length, and 3.8m draft can be accommodated.

A church, with a prominent spire, stands 0.3 mile S of the root of the breakwater. Helen's Tower, a conspicuous landmark, stands 2.6 miles SSW of the harbor. A conspicuous monument stands on Scrabo Hill, 2.7 miles SSW of Helen's Tower. Both Helen's Tower and the monument disappear as the S shore of the lough is approached.

It is reported that a radio mast that stands on Cairngaver, 2 miles WSW of Helen's Tower, is conspicuous from the N and E parts of the lough. A prominent group of three radio masts is reported to be situated 2.5 miles W of Cairngaver.

Grey Point, located 2.5 miles WNW of Bangor, is a bluff point, 23m high. The surrounding shore in this vicinity is comparatively low.

**Tides—Currents.**—The entrance to the lough is at right angles to the course of the currents setting through North Channel. Therefore, although the outside currents may set with considerable force, the currents inside the mouth of the lough seldom exceed a rate of 1 knot at springs.

The currents within Copeland Sound, in the SE approaches to the lough, generally set in the direction of the channel. Although their rates may vary in different localities, rates of up to 4.5 knots may be observed at springs in both directions.

**Anchorage.**—Vessels seeking shelter within the lough must be governed in their choice of anchorage berth by their draft, but during E gales, better shelter is provided in the inner reaches.

Excellent sheltered anchorage is provided for large vessels between Grey Point and Carrickfergus in depths of 9 to 11m, 0.5 mile to 1.5 miles from the S shore.

Small craft can anchor in depths of 4 to 6m SE of Carrickfergus, but this roadstead is rather exposed during the winter. Small craft can also anchor in depths of 3 to 4m within Sea Park Anchorage about 0.8 mile SW of Carrickfergus.

Small vessels can find good anchorage in depths of 5 to 7m within Folly Roads about 2.1 miles SSW of Carrickfergus and on the N side of Victoria Channel.

**Caution.**—Several wrecks lie in the approaches to Belfast Lough and may best be seen on the chart.

Submarines frequently exercise off the entrance to Belfast Lough.

#### Belfast (54°37'N., 5°54'W.)

World Port Index No. 33770

**6.14** The port of Belfast lies at the head of the lough near the mouth of the River Lagan. It is approached through Victoria Channel which leads between extensive drying banks fronting both shores. The harbor, in addition to numerous cargo handling berths, includes extensive repair and shipbuilding facilities.

**Tides—Currents.**—The tides rise about 3.5m at springs and 3m at neaps.

Within Victoria Channel and the mouth of the river, the flood currents are usually weak, but the ebb currents attain rates of 1.5 to 2 knots at springs.

**Depths—Limitations.**—The seaward section of Victoria Channel, up to the outer oil berth, has an intended dredged depth of 9.1m over a width of 122m. A turning basin at the inner end of Victoria Channel has an intended dredged depth of 8.7m over a radius of 213m. The main harbor channel continues SW from the turning basin and has intended dredged depths which gradually decrease from 8.7m to 5.5m. Herdman Channel, which leads NW from Victoria Channel and passes to the N of West Twin Island, has an intended dredged depth of 7.4m. Musgrave Channel, which leads SE from Victoria Channel and passes to the S of East Twin Island, has an intended dredged depth of 7.3m.

The harbor includes 7,400m of total quayage which provides cargo berths up to 579m long with dredged depths of 4.3 to 10.4m alongside. There are also four oil berths, 182 to 305m long, with dredged depths of up to 11.3m alongside.

The port has facilities for general cargo, ro-ro, container, bulk, LPG, tanker, and ferry vessels. Vessels are only limited by draft. Cargo vessels of up to 10.2m draft and tankers of up to 10.6m draft can be accommodated alongside.

In addition, there are extensive repair services. The repair facilities include several dry docks. Belfast Dry Dock, the largest, can handle vessels of up to 200,000 dwt. Harland and Wolff shipbuilding dock can take vessels of up to 1,000,000 dwt.

**Aspect.**—Divis Mountain, 478m high, rises 3.7 miles W of the port and stands at the head of the lough. Two short, conspicuous radio masts, which are floodlit, stand on the summit of this mountain and a conspicuous television mast stands 0.3 mile SE of them. Another conspicuous television mast stands on Black Hill, 1.5 miles S of Divis Mountain.

A very conspicuous television tower stands on Carnmoney Hill, 3.7 miles NNW of the port. Cave Hill, 356m high, stands 2.5 miles NW of the port. It has a very jagged outline and a precipitous summit. Belfast Castle, situated on the SE slope of this hill, is prominent.

A conspicuous silo, 85m high, stands at the outer end of West Twin Island which is situated on the N side of the channel, 1 mile within the harbor entrance. Three conspicuous chimneys, 73m high, stand near the power station situated 0.3 mile SW of the silo. Several conspicuous cranes, 110m high, stand at the shipbuilding dock 1 mile S of the silo.

The prominent buildings and tanks of an oil refinery stand on the SE side of the harbor entrance and a prominent chimney stands on the N side, 0.2 mile N of the silo. A church, with a conspicuous spire, stands close to the coast, 2.3 miles NE of the silo.

The fairway of Victoria Channel is marked by lighted buoys and lighted beacons. The channel entrance is marked by No. 1 buoy which is lighted and moored about 1.5 miles SE of Carrickfergus.

**Pilotage.**—The harbor limits lie W of a line extending between Carrickfergus and Grey Point. Pilotage is compulsory within the harbor limits for vessels over 100m in length and all vessels carrying passengers, hazardous cargo in bulk, or in ballast and not gas free. It is also compulsory for vessels without effective radar in visibility less than 0.25 mile. Vessels should send an ETA at least 2 hours in advance. Pilots may be contacted by VHF, board in position (54°41.9'N., 5°44.4'W.) and are stationed in Belfast.

**Regulations.**—A Traffic Information Service has been established in the approaches to the port. Vessels inbound are requested to establish contact by VHF with Belfast Port Control not less than 2 hours before arrival at No. 1 buoy. Vessels should then report when passing No. 1 buoy and No. 14 beacon, when anchoring, and when berthing.

Vessels underway and at anchor within the port limits should maintain a continuous VHF listening watch. The service, upon request, will provide information concerning traffic, visibility, tides, and berthing. **Caution.**—Dredging operations are constantly in progress within the harbor and channel approaches. Vessels are cautioned to proceed at slow speed when navigating in the vicinity to avoid damage to the dredge or moorings.

The intended dredged depths within the port are not always maintained due to silting.

Due to the existence of submarine cables, anchorage is prohibited in Victoria Channel and within 80m of the lighted beacons.

A fast ferry (Seacat) operates up to five times daily at full speed within Victoria Channel.

# **Belfast Lough to Strangford Lough**

**6.15** Foreland Point (54°39'N., 5°32'W.), located 2 miles SE of Orlock Point, is fronted by rocks and shoals which are marked by a beacon. A shallow spit extends N for about 0.4 mile from the point.

Donaghadee Sound lies between the S side of Copeland Island and the mainland coast. The SE entrance of this passage is encumbered with several rocks. A fairway channel, which has charted depths of less than 6m, leads through the sound and is marked by lighted buoys. The tidal currents in this sound set almost in the direction of the channel. They may vary in different parts of the sound, but can attain rates of up to 4.5 knots in both directions.

**Caution.**—Only vessels with local knowledge and a speed of at least 10 knots should enter Donaghadee Sound against the strong currents. Heavy rips, amounting to overfalls at times, extend across the sound, close NE of the beacon marking Foreland Spit.

**Donaghadee** (54°39'N., 5°32'W.), a small and shallow harbor, lies 0.7 mile SE of Foreland Point and is protected by two breakwaters. The harbor basin has depths of up to 2.7m, but mostly dries. It has an entrance, 46m wide, and is used by small craft. A yacht marina lies 0.3 mile SSE of the harbor basin. The small town of Donaghadee stands close W of the harbor and is a resort. A main light is shown from a prominent tower, 16m high, standing at the head of the S breakwater.

Rigg Bank, with a least depth of 11m, lies centered 2 miles E of Donaghadee. The tidal currents at a position about 0.5 mile NE of the harbor set E and NNW and attain rates of up to 2 knots at springs.

Ballyferris Point is located 4.2 miles SSE of Donaghadee. The coast between is fronted by rocks and sunken ledges which extend up to 0.5 mile offshore.

**Caution.**—A submarine cable and several disused cables extend seaward from a point on the coast 1.5 miles S of Donaghadee.

**Ballywalter** (54°33'N., 5°29'W.), a village, is situated 2 miles SSE of NNW Ballyferris Point. The shore between is fronted by sunken ledges and rocks which extend up to 0.8 mile seaward. This village is fronted by a small harbor which is formed by a drying sandy foreshore and protected by a pier at its S end. Small craft can berth alongside the N side of the pier in depths of 2 to 3m at HW. A church, with a prominent spire, stands in the village.

Skulmartin Rock, which dries, lies about 1 mile ESE of Ballywalter and is marked by a prominent beacon. A lighted buoy is moored about 1.5 miles ESE of this rock.

Burial Island, 8m high and surrounded by a rocky ledge, lies close off Burr Point which is located 3 miles SSE of Skulmartin Rock. Temporary anchorage can be taken in depths of 8 to 12m within Ballyhalbert Bay which is entered NW of the island.

**Portavogie** (54°27'N., 5°26'W.), a small harbor, lies 2 miles S of Burial Island. It is protected by breakwaters and used by numerous fishing vessels. The town stands mainly on its N side. Vessels of up to 37m in length and 3m draft can enter. Rocks and drying shoals, which extend up to 0.5 mile offshore, front the coast close N and S of the harbor. A lighted buoy is moored about 0.5 mile ESE of the entrance.

North Rock lies on an irregular bank of rocks and gravel, which mostly dries, near the outer extremity of Kirkistown Spit. This spit extends about 1.5 miles SE from a point on the coast 1.2 miles SSW of Portavogie. A prominent beacon, 12m high, stands on the E end of North Rock. With a NE wind, small vessels can anchor in a depth of 7.3m, coarse sand, to the S of Burial Island and WSW of the beacon on North Rock.

The Breast, a rocky patch, lies about 0.7 mile SSW of the beacon on North Rock and has a least depth of 2.1m.

The Ridge, a dangerous rocky patch, lies about 1.5 miles SSE of North Rock and is marked by a buoy. During strong breezes, the sea breaks over this patch and the currents always cause rips in this vicinity.

South Rock, which dries, is the largest of an extensive group of rocks and dangers which lie SW of The Ridge. A prominent disused light tower, 18m high, stands on the rock.

Small vessels can pass on either side of The Breast and also between South Rock and the coast.

**South Rock Light-Float** (54°24′N., 5°22′W.) is moored about 2 miles ENE of South Rock. A racon is situated at this light-float.

**Ballyquintin Point** (54°20'N., 5°30'W.), low and shelving, is the S extremity of the peninsula which separates Strangford Lough from the Irish Sea. Tara Hill, with a prominent old fort on its summit, stands 1.5 miles N of the point.

Butter Pladdy, a group of shallow rocks, lies about 1 mile offshore, 3.2 miles NE of the point. A drying wreck lies on this group and a lighted buoy is moored close E of it. Several isolated shoal patches, with depths of less than 3m, lie between Butter Pladdy and South Rock.

The coast to the N of Ballyquintin Point consists of a low and rocky shore backed by undulating hills. Ballywhite Mill, a conspicuous disused windmill, stands on the W side of the peninsula, 4.5 miles NNW of Ballyquintin Point. It can be seen from seaward over some parts of the coast.

#### **Strangford Lough Narrows**

**6.16** Strangford Lough Narrows (54°20'N., 5°30'W.) are entered between Ballyquintin Point and Killard Point, 1.2 miles SW. The Narrows lead NNW for 5 miles into Strangford Lough where several sheltered anchorages are available for large vessels, at all stages of tide, with excellent holding ground and sufficient depths. Similar anchorages are provided for small vessels in various parts of the entrance. The

usefulness as a harbor of refuge is impaired by the strong tidal currents which are always prevalent. These currents attain maximum rates of 7.5 knots at springs off Strangford Point which is located on the W side of the narrows, 3.5 miles above Killard Point.

Berthing facilities are provided for small coastal vessels at Strangford and Portaferry, which lie on opposite sides of The Narrows in the vicinity of Strangford Point.

**Tides—Currents.**—The tidal currents at a position about 3 miles outside the entrance set in the direction of the coast. They are weak and probably do not exceed a rate of 0.5 knot at springs.

During the ebb current, tide races form off the entrance of The Narrows, especially with S winds. As the lough fills and empties every 12 hours, the currents set through The Narrows at a considerable speed, attaining rates in excess of 7 knots at springs. Where these currents set over a shallow spit extending from Rue Point, a violent disturbance is sometimes caused with whirlpools. This disturbance is known as The Routen Wheel and is easily avoided. However, less violent disturbances occur throughout the channel when the currents are strong. Inside the lough, the currents set at greatly reduced rates and leave an area of comparatively calm water to the SW.

**Depths—Limitations.**—There are depths of over 50m in The Narrows, but the bottom is very uneven. A least charted depth of 8.8m lies in the fairway channel with lesser depths adjacent to it.

East Channel, the main entrance route, leads between the shoals that front the entrance points and passes E of Angus Rock which lies 1 mile N of Killard Point.

West Channel, which leads over a bar and W of Angus Rock, has a least charted depth of 3.9m. It is narrow, bordered by sunken rocks, and unmarked. Small craft use this channel to avoid the strength of the tidal current in East Channel, but local knowledge is required.

When the ebb current and the wind are in opposition, a heavy breaking sea is often encountered close outside the entrance. When the ebb current slackens, this breaking sea subsides and navigation is then comparatively easy.

Aspect.—Approaching from seaward, conspicuous landmarks near the entrance include several radar aerials

situated on Killard Point; an obelisk standing on Guns Island, which lies 1 mile SSW of Killard Point; and a windmill standing on the E side of The Narrows, 3 miles NNW of Ballyquintin Point.

A main light is shown from a prominent tower, 13m high, standing on the N end of Angus Rock which lies 0.9 mile W of Ballyquintin Point.

The W side of The Narrows is of moderate elevation and backed by high hills. Within the entrance, a castle and a church stand 1.5 miles N of Killard Point and are conspicuous.

Ballywhite Hills stand on the E side of The Narrows, 4.5 miles NNW of Ballyquintin Point. They attain heights of 100m and are conspicuous.

Beacons mark the dangers lying adjacent to the fairways and an outer approach lighted buoy is moored about 1.5 miles SE of Ballyquintin Point.

**Pilotage.**—Pilotage is not compulsory, but is advisable and available. Pilots can be contacted by VHF and generally board about 1.3 miles S of Ballyquintin Point. Pilots should be requested in advance.

**Anchorage.**—With offshore winds, vessels waiting to enter The Narrows can anchor in depths of 12 to 15m off Ballyquintin Point.

**Caution.**—A vehicle ferry plies across The Narrows between Strangford and Portaferry.

6.17 Strangford Lough (54°25′N., 5°36′W.), an extensive inlet with very irregular depths, contains numerous anchorages for deep-draft vessels with excellent holding ground. These anchorages are, for the most part, in deep water and somewhat exposed, with the approaches obstructed in many cases by detached drying shoals. There are depths of 10 to 60m in the entrance of the lough. Very few vessels frequent the inner reaches of the lough and those that do are usually of the smallest type. For navigating the inner reaches, the services of a local pilot must be employed. There is little commercial traffic within the lough. Due to the considerable area of unobstructed water, the lough is a popular place for numerous pleasure craft and a racing ground for small craft.

**Caution.**—Several fish farms are situated within Strangford Lough.